

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

1
PG 98
SP

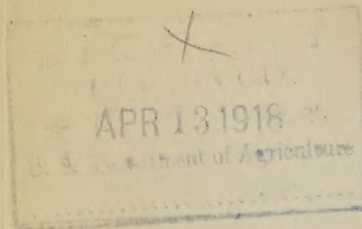
UNITED STATES DEPARTMENT OF AGRICULTURE.

BUREAU OF PLANT INDUSTRY.

New and Rare Seed Distribution.

WASHINGTON, D. C.

FIELD PEA (*Pisum sativum*).



[S.D. 16 -
1918]

OBJECT OF THE DISTRIBUTION, -- The distribution of new and rare seeds has for its object the dissemination of new and rare crops, improved strains of staple crops, and high-grade seed of crops new to sections where the data of the department indicate such crops to be of considerable promise. Each package contains a sufficient quantity for a preliminary trial, and where it is at all practicable the recipient is urged to use the seed for the production of stocks for future plantings. It is believed that if this practice is followed consistently it will result in a material improvement in the crops of the country. Please make a full report on the inclosed blank regarding the results you obtain with the seed.

The field pea was early introduced from Europe, where it has been cultivated from remote times. Its preference for a cool climate limits its cultivation as a summer crop to the northern part of the United States or to high mountain valleys, which on account of their elevation possess a cool atmosphere even during the summer months. It can be grown in warm parts of the United States, especially southern California, as a winter legume. Trials made in southern Texas warrant a more extended use of it in this way. This preference for a cool climate has confined the field-pea industry on this continent very largely to Canada and given rise to the name "Canada field pea" or "Canadian pea."

The field pea is a close relative to the common garden pea, several varieties being used interchangeably as garden and field crops. The main point of difference in the two classes is the wrinkled character of the garden-pea seed, indicating a higher sugar content than the field pea. The field pea is so well known that little description is necessary. It is an annual leguminous vining plant, having both dwarf and tall varieties, which range from 18 inches to 10 feet in height. Most of the varieties have white flowers, but there are many having colored (red or pink) flowers.

S.P.I. 17006. -- A medium variety introduced from Germany. It is valuable as a general-purpose pea on account of its erect growth, its ability to withstand rather high temperatures, and its good yields of both forage and grain. The bloom is purple, and the seed is rather large and angular, grayish in color speckled with purple.

SEED BED AND SEEDING.

The field pea does best in a clay-loam soil, but it is not extremely particular in this regard. An abundance of lime in the soil is advantageous. A fairly small rainfall where the temperature is low is sufficient. Low temperatures are very important for the success of the crop, very few peas being grown in the South for this reason. In the Central and Northern States one should be

careful to seed the field peas as early in the spring as possible. In the Southern States they must be sown in the fall, about the time cool weather is at hand, or early enough in the spring to mature before hot weather arrives. Spring seeding in the South is usually done in January or February.

The seed of field peas weighs 60 pounds to the bushel and retails for \$1.50 to \$3.25 per bushel. The rate of seeding should vary with the size of the pea and the amount of moisture available. In humid regions or under irrigation, when the peas are seeded alone the amount of seed varies from $1\frac{1}{2}$ bushels of the small peas, like the Golden Vine, to 3 bushels of the large-seeded sorts, like the Marrowfat.

If the crop is to be used for hay the peas are nearly always seeded in mixture with some small grain, such as oats. The mixture of grain prevents the peas from lodging so badly and makes the harvesting easier. Some growers prefer the mixture even where the crop is designed for grain or pasture. Where seeded in mixtures the usual amount of seed used in the humid regions or under irrigation is 1 bushel of field peas and $1\frac{1}{2}$ bushels of oats. Under more arid conditions the quantity of grain should be decreased to 1 bushel.

Where the rainfall is extremely light it has been found advisable to plant the field pea in double rows about 6 or 7 inches apart, with 30 to 36 inches between each pair of rows, so that the peas can be cultivated during the growing season. The planting can be accomplished with an ordinary grain drill by stopping up the required number of feeds. When sown in this way 30 to 40 pounds of seed to the acre are sufficient. This method is most valuable when the peas are intended to be utilized as a grain crop.

HARVESTING.

Peas are usually harvested with a mower, an attachment being fastened to the cutter bar which raises the tangled vines from the ground. It is generally necessary to have several men follow the mower and roll the pea vines back in the swath so that they will not be trampled the next time the mower passes through. If intended for hay, the peas are left to cure in the windrow or in bunches and then stacked or placed in hay sheds. Stacks of field peas should be protected from rain by a covering of slough grass or canvas. Where used as a grain crop they are most often thrashed in the field, in order to avoid the shattering due to repeated handling. An ordinary grain thrasher may be adjusted to do the work, though a special pea or bean thrasher is better. In some sections peas are harvested by pasturing with hogs or sheep after the seed is mature. This is a cheap method of gathering the crop; but, as in all such practices, there is considerable waste. Where this method is used a rotation which brings a clean cultivated crop, like, corn, after the field peas should be followed, in order to get rid of the weeds.

Approved:

Wm. A. Taylor,
Chief of Bureau.

September 9, 1916.

